

LiPo Battery

Specifications:

- **Capacity:** 2650 mAh
- **Voltage Rating:** 3S = 11.4V
- **Discharge Rating:** 30C

Additional Calculations:

- **Total Current Discharge Capacity:** $30 \times C = 30 \times 2.65 \text{ Ah} = 79.5 \text{ A}$ (maximum)
- **Battery Voltage:** 3S = 3 (3.7V) = 11.1V

Servo Motor: RobotStar SBRS-5314HTG 280° Digital Metal Gear

Specifications:

- **Operating Voltage:** 7.4-11.1 V
- **Operating Speed:** 0.18 sec/60° or 0.14 sec/60°
- **Stall Torque:** 32.4 kg.cm or 53.1 kg.cm
- **Rotation Scope:** 0-280°
- **Weight:** 81g
- **Size:** 43 x 32 x 32.5 mm
- **Operating Frequency:** 1520 us/333 Hz, 900-2100 us
- **Approximate Current Draw Range (Forum):** 4-8 A

Power Supply Relay: SPDT Relay (30A)

Specifications

- 1 common terminal
- 1 Normally Open (NO) terminal
- 1 Normally Closed (NC) terminal
- **Weight:** 37g
- **Size:** 20 x 20 x 8 mm
- **Operating Voltage:** 4.75-5.25V
- **Contact rate:** 250 VAC, 30 VDC
- **Switching Current rate:** 30A

Solenoid Relays: 5V 2-Channel Relay Module 10A

Specifications

- Two Straight Headers, each with:
 - 1 common terminal
 - 1 Normally Open (NO) terminal
 - 1 Normally Closed (NC) terminal
- **Size:** 39 x 51 mm
- **Operating Voltage:** 5V
- **Contact rate:** 10A, 28 VDC

Solenoids: 12 VDC Pull Push Solenoid (Adafruit)

Specifications

- **Current Draw:** 250mA
- **Operating Voltage:** 12V
- **Weight:** 144 g
- **Size:** 40 x 29 x 25 mm
- **Starting Force:** 6N (50% duty cycle)

